

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit: 1796

HANS PETER WEITZEL et al.

Examiner: Alexander C. Kollias

Serial No.: 10/596,266

Filed: June 7, 2006

For: USE OF BIOCIDES-CONTAINING, WATER-REDISPERSIBLE POLYMER
POWDER COMPOSITIONS IN MINERAL CONSTRUCTION
MATERIALS

Attorney Docket No.: WAS 0768 PUSA

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Mail Stop Appeal Brief - Patents
Commissioner for Patents
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants hereby respond to the Examiner's Answer dated August 9, 2011.

First, Appellants apologize for an error in the section "A." on page 10 of the Brief, where "32" should be "43." Appellants apologize for this error. The Statement of Grounds for Rejection on page 2 is correct in this respect.

Appellants do not intend to respond to every contention in the rather voluminous Answer. However, Appellants believe that emphasis should be placed on certain matters to properly place the issues in this Appeal in perspective, and to correct what Appellants respectfully submit are rather glaring inaccuracies.

It is first noted that each of the rejections is based on the *Weitzel* reference, either as a primary or secondary reference, and that *Weitzel* teaches diametrically away from the claimed invention. The entire thrust of *Weitzel* is to avoid the use of biocidal actives themselves, by incorporating the actives into a cyclodextrin complex. Appellants do not do

so, but add the biocidal active in uncomplexed form, a form *Weitzel* teaches away from using. Teaching away is strong evidence of non-obviousness. In this respect, both the reference and the present invention must be viewed as a whole. It is noted, again, that the *Weitzel* reference was discussed in the present specification, that Dr. Weitzel is an inventor in both the reference and the present application, and clearly would not have claimed what he already had disclosed and claimed in his own prior application.

The Office's contentions with respect to *Weitzel* revolve around a clearly incorrect definition of the term "active." The Office states that Appellants have not defined this term in the specification, and that is true. However, the specification of a patent does not have to define terms which are well known and well understood by those skilled in the art. The term "active" has been used in the medical, pharmaceutical, horticultural, and biocidal fields for decades and is well known to refer to the active ingredient *per se*. Dr. Weitzel has attested to this in his Declaration, and the use of this term in the present application is consistent with the use of this term by *Botts*, cited by the Office. The Office has criticized the *Weitzel* Declaration's discussion of "active" as being "conclusionary." That is incorrect. There is no "conclusion" drawn. Dr. Weitzel is an expert in the field of RDPs and is qualified to testify as an expert. As an expert, his testimony must be accorded great weight. However, even in the absence of such testimony, the clear knowledge of those skilled in the art as well as common sense support the proffered meaning of "active." A cyclodextrin complex of an active is not an active – it is a complex containing an active. An encapsulated fish oil (omega-3 fatty acids) which weighs 800 mg and contains 500 mg of fish oil does not contain 800 mg of active ingredient. It contains 500 mg. Likewise, 100g of a cyclodextrin complex of a biocide containing 24 weight percent biocide is not 100 g of biocide. It is 24 g of biocide, 24 g of "active."

The Examiner's construction of the term "active" cannot stand. It is not a reasonable interpretation, is contrary to how those skilled in the art view the term, is contrary to the construction given to the term by experts, and is contrary to the use of the term in the *Weitzel* reference as well as the present application.

The Office refers again to spray drying by *Botts*. Again it is noted, and apparently not understood by the Office, that the spray drying of *Botts* is completely different from the spray drying used by Appellants. *Botts* spray dries a solution of a biocide dissolved in polymer and organic solvent, to form polymer particles containing uniformly dispersed biocides. These particles are not RDPs and bear no relation to RDPs. The Office even further believes that "RDP" should be defined in the specification, as the Office also did with the term "active." Well known terms need not be defined; the patent laws do not require this; and the Courts and USPTO discourage this. If each and every word were defined in the specification, each patent specification would be as voluminous as an encyclopedia. RDPs are well known in the art, as indicated by the "TIZ" reference, which is of record. An RDP cannot, by definition, be prepared from a dissolved polymer. It must be prepared by spray drying a particle dispersion, a dispersion in which the polymer is already in particulate form. In *Botts*, there are no particles of polymer in dispersion. The polymer is dissolved in solvent. Particles do not form until the solvent evaporates. These are not RDPs. Moreover, in *Botts*, the "actives" are dispersed within the polymer particles as these particles form by solvent evaporation during spray drying. In RDPs, this cannot happen, since the particles have already been formed (by emulsion polymerization) prior to adding the active. The active cannot be dispersed within the particles as in *Botts*. The aim of Appellants was not the same as *Botts* – to produce a "timed release" active which slowly exudes over time. Appellants wish their biocides to be immediately available and effective. *Botts* wishes slow release to avoid phytotoxicity, *i.e.* to kill the target organism (fungus, etc.) but not the plant to which they are applied. Curable mineral construction compositions such as stuccos and mortars are not plants. They have no phytotoxicity problems. One skilled in the art would not even look to *Botts* for any purpose. *Botts* is non-analogous.

Appellants cited several old, well known references drawn to cyclodextrin complexes and the definition of actives, which the Office has ignored. True, these references were not previously submitted. They are, however, but several examples showing what was well known in the art with respect to these two matters, long before Appellants' application was filed, so long (1995, 1988) that judicial notice may be taken of their teachings. Again, it is not the purpose of the specification to describe what is well known.

In conclusion, it is emphasized that Appellants' use of the term "active" is consistent with the construction one skilled in the art would give this term, and when thus construed, the *Weitzel* reference, which is common to all rejections, would direct the skilled artisan away from the claimed invention, by requiring cyclodextrin complexes of actives, not the actives themselves. When viewed in the proper context, the rejections cannot be maintained and should be reversed.

Respectfully submitted,

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